certain plants are relatively effective in muffling traffic noises. This is a comparatively untouched area and one in which the planting designer needs more technical information. It is quite well known that plants absorb some noxious gasses, act as receptors of dust and dirt particles, and generally cleanse the air of impurities. As air pollution becomes a national concern the importance of the role of plants in exterior air conditioning becomes increasingly apparent.

Much research and study has been made in current highway planning and construction as to the effectiveness of plants in controlling soil erosion on steep slopes.

CLIMATE CONTROL

The uses of plants for climate control are proverbial. "Shade" trees, "windbreak" trees and "snofence" plantings are examples. The mention of functional use of plants ordinarily causes most people to think of climate control. To ascertain the degree to which the microclimate can be altered by the discreet placement of the correct plant materials, extensive quantitative studies are necessary. It is well known, however, that plants may be used to alter adverse microclimates making the environment more pleasant and liveable for man.

This change is effected through interception of precipitation and solar radiation and through wind and temperature control.

The ground temperature in a forest may be as much as 25 degrees cooler than the top of the tree canopy in the daytime. A vine-covered wall is cooler than a bare wall. An evergreen tree planted close to the wall of a building will create a "dead-air space" between the tree and the wall thus insulating the building from abrupt temperature changes. Plants at the base of slopes will create a cold air or "frost pocket." Deciduous trees may screen the hot sun in summer, and in winter allow its warming rays to pass between the bare branches. On ski slopes, snow will not melt on the north side of tall evergreens, thus snow can be placed where it is wanted and kept from where it is not wanted by the use of correct plants and location. Wind can be increased, decreased or directed by plants. An example of the extensive research carried on in this area is the shelter belt program in the prairies in the 1930's.

It is regrettable that planting designers do not always avail themselves of such information nor do they always use plants intelligently or as effectively as they might to control climate.

ESTHETIC USES

While this is generally the prime factor determining the use of plants, people often do not consider it functional. A plant nevertheless, whether specimen, topiary, "bonsaied," or windcarved, may prove as effective a piece of sculpture as a work by Calder or Henry Moore.

Placed against a plant wall, a plant with an interesting branching pattern may present a pleasing display of line calligraphy. A hedge can serve as an ever-changing backdrop against which to display other landscape elements. As our world becomes more crowded with man-made materials, it is imperative to soften harsh lines and to unify problem areas.

Plants can be used to blend together various unrelated elements such as buildings, utility structures or disharmonious land usages in an area. Totally unrelieved man-made surrounding have a stifling effect upon their maker. By attracting birds and animals into the landscape, plants add to their own beauty and bring natural elements into urban surroundings.

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